

Claims

1. An overpressure valve (10; 10a; 40) for a packaging container (5), comprising two components, that is, a cup-shaped, rigid holder body (11; 11a; 50), which has a raised peripheral region (13; 13a) extending all the way around and the top side of which [holder body apparently, not region 13] can be joined to a length (3) of packaging material that forms an inside (2) of the packaging container (5), and in the middle region (12) of which at least one passage (19, 20; 44) for gas is embodied, and having [sic - I think this would be the second component mentioned above] a valve diaphragm (22; 22a; 48), which closes the at least one passage (19, 20; 44) in the holder body (11; 11a; 50) up to a defined overpressure in the packaging container (5) and if the overpressure is exceeded forms a conduit for the outflowing gas, which escapes from the packaging container (5) via at least one opening (4; 38) embodied in the length (3) of packaging material of the packaging container (5) inside the peripheral region (13; 13a), wherein [marker for invention, or not? maybe the whole claim is the invention - in that case just say "and"] the valve diaphragm (22; 22a; 48) is joined in captive fashion to the holder body (11; 11a; 50), and wherein in the middle region (12), at least one indentation (15; 15a; 42) is embodied in the region of the at least one passage (19, 20; 44).

2. The overpressure valve of claim 1, characterized in that the indentation (15; 15a) has the form of at least two intersecting circles (16, 17) and one passage (19, 20) is embodied at each of the center points of the circles (16, 17).

3. The overpressure valve of claim 1, characterized in that the indentation (42) has the form of a corporate logo or of a protected design trademark (43).

4. The overpressure valve of one of claims 1 through 3, characterized in that the valve diaphragm (22; 22a; 48) is joined to the holder body (11; 11a; 50) on at least two opposed

sides inside the peripheral region (13; 13a), between which sides the at least one passage (19, 20; 44) is disposed, and between the top side of the valve diaphragm (22; 22a; 48) and the top side of the peripheral region (13; 13a) of the holder body (11; 11a; 50); a spacing (a) is formed, in order to enable the escape of the gas to the at least one opening (4; 38) in the packaging container (5). [escape or outflow]

5. The overpressure valve of claim 4, characterized in that the holder body (11; 11a; 50) is embodied as a rotationally symmetrical, shallow body; and that the valve diaphragm (22; 22a; 48) is embodied in striplike fashion, with two straight edges (24, 25) disposed opposite one another.

6. The overpressure valve of claim 5, characterized in that the valve diaphragm (22; 22a; 48), in its regions (31, 32; 51, 52) joined to the holder body (11; 11a; 50), extends as far as the peripheral regions (13; 13a); and that the valve diaphragm (22; 22a; 48), in the regions not joined to the holder body (11; 11a; 50), is spaced apart from the peripheral region (13; 13a) of the holder body (11; 11a; 50), so that at least one passage for the gas is formed.

7. The overpressure valve of one of claims 1 through 6, characterized in that on the top side of the holder body (11), in the region where it is joined to the packaging container (5) or the length (3) of material, at least one raised area (14) extending all the way around is embodied for joining the holder body (11) to the length (3) of material by ultrasonic welding.

8. The overpressure valve of one of claims 1 through 6, characterized in that an adhesive layer (37) is applied to the top side of the holder body (11a), in the region where it is joined to the packaging container (5) or the length (3) of material.

9. The overpressure valve of one of claims 1 through 8, characterized in that the indentation (15; 15a; 42) has a depth of approximately 0.2 mm relative to the middle region (12).